

REMARKS

The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Claims 1-22 are pending in this case. Claims 1-12 have been rejected under 35 U.S.C. § 101. Claims 8-9 have been rejected under 35 U.S.C. § 112, second paragraph. Claims 1-2 have been rejected under 35 U.S.C. § 102(e). Claims 3, 6-7 have been rejected under 35 U.S.C. § 103(a). Claims 13-22 have been allowed. Independent claims 1 and 10 have been amended. Claims 4, 8-9 have been cancelled.

Personal Interview

Applicant wishes to thank the Examiner for granting a personal interview on August 7, 2007. The interview participants included Examiner Jean B. Corrielus and Howard Zaretsky (Applicant's representative).

New Figure 9

In accordance with the suggestion of the Examiner, Applicant submits a new Figure 9 illustrating the flow chart of the transmit method of the present invention. Support for the new Figure 9 can be found in Paragraphs [0044] through [0053]. The new figure is intended to better clarify and illustrate the transmit method of the invention. No new matter has been added with the addition of this figure.

Response to 35 U.S.C. § 101 Rejections

The Examiner rejected claims 1-12 under 35 U.S.C. § 101, because the claimed invention is directed to non-statutory subject matter. Considering claim 1, the Examiner asserted that the "start packet synchronization sequence" is a signal per se which is an abstract idea and does not fall into any statutory class of invention.

In response, Applicant has amended claims 1 and 10 to recite language that provide a practical application of generating the synchronization sequence which produces a tangible and concrete practical result.

Applicant believes that amended independent claims 1 and 10, and hence dependent claims 2-3, 5-7, 11-12, overcome the Examiner's rejection based on § 101. The Examiner is respectfully requested to withdraw the § 101.

Response to 35 U.S.C. § 112, Second Paragraph Rejections

The Examiner rejected claims 8-9 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In response, Applicant has canceled claims 8-9 thus making this rejection mute. The Examiner is respectfully requested to withdraw the § 112, second paragraph rejection.

Response to 35 U.S.C. § 102(e) Rejections

The Examiner rejected claims 1-2 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,865,177 ("Park et al."). Applicant respectfully submits that the prior art fails to disclose or suggest at least generating a start of packet sync sequence comprising gaps adapted to maximize autocorrelation properties of the sequence and to convey packet type information to a receiver at the other end of the channel. Therefore, Applicant respectfully traverses the rejections and request favorable reconsideration.

While continuing to traverse the Examiner's rejections, Applicant, in order to expedite the prosecution, has chosen to clarify and emphasize the crucial distinctions between the present invention and the devices of the patents cited by the Examiner. Specifically, claim 1 has been amended to include a method of generating a start of packet synchronization sequence for use in a transmitter, said method comprising the steps of generating a plurality of N symbols to be transmitted in said synchronization sequence, wherein N is a positive integer, generating N-1 predetermined signals, chosen to maximize autocorrelation properties of said synchronization sequence, wherein said N-1 predetermined signals convey packet type information to a receiver, inserting one of said N-1 predetermined signals after each of the first N-1 symbols in said synchronization sequence, encoding said synchronization sequence; and transmitting said encoded synchronization sequence into a channel.

Park et al. teaches an apparatus and method for generating a frame sync word and verifying the frame sync word in an asynchronous CDMA communication system. In the apparatus for generating a sync word for synchronization of frames each having a predetermined

number of slots, each of at least two m-sequence generators generates the predetermined number of sequential elements, and a selector multiplexes the sequential elements received from the m-sequence generators and assigns the multiplexed elements in the slots.

In contrast, the method of the present invention generates a start of packet sync sequence that is adapted to convey packet type information in the intersymbol gaps inserted between the transmitted symbols. This feature is neither taught nor suggested by the Park et al. reference.

Further, the intersymbol gaps inserted between the transmitted symbols are adapted to maximize the autocorrelation properties of the sync sequence. This feature is neither taught nor suggested by the Park et al. reference.

Applicant has reviewed the cited art and respectfully submits that the art fails to disclose or suggest the Applicant's claimed invention, and fails to teach each and every element and limitation of the claims rejected herein. Therefore Applicant respectfully traverses the rejections and requests favorable reconsideration.

It is believed that amended independent claims 1 and 10 overcome the Examiner's § 102(e) rejection based on the Park et al. reference. In addition, it is believed that dependent claims 2-3, 5-7, 11-12 also overcome the Examiner's rejection based on § 102(e) grounds. The Examiner is respectfully requested to withdraw the rejection based on § 102(e).

Response to 35 U.S.C. § 103(a) Rejections

The Examiner rejected claims 3, 6-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,865,177 ("Park et al."). Applicant respectfully submits that the prior art fails to disclose or suggest at least generating a start of packet sync sequence comprising gaps adapted to maximize autocorrelation properties of the sequence and to convey packet type information to a receiver at the other end of the channel. Therefore, Applicant respectfully traverses the rejections and request favorable reconsideration.

In light of the amendments made to claim 1 and the arguments presented above, it is submitted that claim 1 is not obvious in light of Park et al. Claims 3, 6-7 depend from claim 1. Accordingly, Applicant also submits that claims 3, 6-7 are not obvious in light of Park et al. The Applicant respectfully traverses the rejection of claims 3, 6-7 and submits that the presently claimed invention is patently distinct over Park et al. The Examiner is respectfully requested to withdraw the rejection based on 35 U.S.C. §103(a).

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that independent claims 1 and 10 and hence dependent claims 2-3, 5-7, 11-12 are now in condition for allowance. Prompt notice of allowance is respectfully solicited.

In light of the Amendments and the arguments set forth above, Applicant earnestly believes that they are entitled to a letters patent, and respectively solicit the Examiner to expedite prosecution of this patent applications to issuance. Should the Examiner have any questions, the Examiner is encouraged to telephone the undersigned.

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Respectfully submitted,

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